

WHAT IS CLAIMED IS:

1. An interactive grid-based graphical trading system for use by any trader who engages in trading securities through established security trading markets, in essentially real time, where the system comprises a grid-based graphical interface for use by any trader, said graphical interface being adapted to establish a connection with any backend system used by any market participant through suitable communication channels;

wherein said interactive grid-based graphical trading system is available through a computer at each participating trader's site;

wherein said interactive grid-based graphical trading system for use by any trader is adapted to receive and display market trading data received from a plurality of market participants, in essentially real time; and wherein any trader may select any particular securities for which data are electively required, at any instant in time;

wherein said interactive grid-based graphical trading system includes first process means that function to send transaction instructions through said communication channels to the backend system used by any market participant, and to receive messages from said backend system through said communication channels; and wherein said grid-based graphical interface includes second process means that function to receive, process, and display said market trading data, and said messages, to any trader;

wherein said market trading data includes information chosen from the group of market trading data consisting of: order data as to buy, sell, or other trading orders existing at that instant in time for any selected security or group of securities, quote data as to bid and ask prices, volume, market participant identifiers, and other parameters, existing at that instant in time for any selected security or group of securities; wherein said market trading data is transmitted to each said grid-based graphical interface at the site of any participating trader from said backend system of any market participant in computer-readable electronic format;

wherein said interactive grid-based graphical trading system includes third process means that function to transform said market trading data received from any back end system, at any instant in time, into a graphical representation for display on any display device, wherein said

graphical representation includes at least one grid having a plurality of cells arranged in an array of at least one row or at least one column;

30 wherein a row is an arrangement of horizontally adjacent cells with at least one common property, and a column is an arrangement of vertically adjacent cells with at least one common property, and wherein each cell within the said plurality of cells belongs to one row and one column;

35 wherein said plurality of cells is arranged in a matrix chosen from the group consisting of a plurality of rows and at least one column, and in a plurality of columns and at least one row, and wherein said plurality of rows or said plurality of columns are associated with an axis representing price.

40 wherein any cell is associated with said market trading data, and contains a graphical representation of said market trading data, and is associated with a specific price or range of prices; wherein each cell along said price axis indicates a price or price range for which said market trading data exists, and the other of said at least one column or said at least one row is indicative of a specific criterion chosen from a plurality of selected criteria within which said market trading data is categorized as to price or a range of prices; and

45 wherein any trader can place, or modify, an order for a selected security or group of securities, over which that trader has discretion, by interacting with said grid-based graphical interface; wherein said interaction can be accomplished by a drag and drop operation; and wherein said order or said quote is represented graphically in a cell.

2. The interactive grid-based graphical trading system of claim 1, wherein said communication channels are network-based, so that at any instant in time a connection between any trader and a backend system of any market participant may be persistent or intermittent.

3. The interactive grid-based graphical trading system of claim 2, wherein said network is the Internet.

4. The interactive grid-based graphical trading system of claim 1, wherein any cell in said plurality of cells is assigned specific visual or graphical attributes or properties chosen from

the group of graphical or visual attributes or properties consisting of: color, border, label indicator, graphic overlay, text overlay, and combinations thereof; and

wherein the specific attribute or property assigned to any cell is a function of the specific market trading data associated therewith.

5 5. The interactive grid-based graphical trading system of claim 1, wherein any trader can modify the parameters of any order, over which that trader has discretion, for a selected security or group of securities being displayed on the grid-based graphical interface, at any instant in time, by selecting a relevant order cell using a pointing device interactive with said grid-based graphical interface, and dragging and dropping said selected relevant order cell to a destination cell; wherein
10 said dragging and dropping of said selected relevant order cell causes said grid-based graphical interface to activate said first process means to send transaction instructions comprising an amendment of previous specific trading parameters associated with the relevant selected order; and wherein said second process means electively affects an alteration of the specific visual or graphical properties assigned to both said relevant order cell and said destination cell.

6. The interactive grid-based graphical trading system of claim 1, wherein said axis associated with price is presented as a specific price range above and a specific price range below the last traded price of a selected security or groups of securities at any instant in time, and wherein said last traded price is present on said price axis.

7. The interactive grid-based graphical trading system of claim 1, wherein said communication channels include middleware used by any market participant.

8. The interactive grid-based graphical trading system of claim 6, wherein the price difference between two adjacent cells along said price axis is the minimum price variance (MPV), or a multiple of the minimum price variance, for any selected security or groups of securities being displayed at any instant in time.

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16. The interactive grid-based graphical trading system of claim 1, wherein the trading data for any selected security being displayed at any instant in time by any trader is constantly updated having regard to new trading data being received by the grid-based graphical interface for that selected security.

17. The interactive grid-based graphical trading system of claim 1, wherein any backend system will perform at least the following tasks: account management for each trading account, processing trading orders for each valid transaction which a trader issues; order execution, whereby each valid transaction issued by any trader is executed; data dissemination, whereby market trading data concerning any security is delivered to any trader's grid-based graphical interface; and backend system management for monitoring and maintaining security and operation of the backend system.

18. The interactive grid-based graphical trading system of claim 1, wherein each market participant is chosen from the group consisting of stock brokerages, electronic communication networks (ECN's), stock exchanges, commodity exchanges, futures exchanges, bourses, and auction houses.

19. The interactive grid-based graphical trading system of claim 1, wherein each selected security for which market trading data is displayed is chosen from the group consisting of shares of stock, commodities, futures, options, bonds, warrants, exchange traded funds (ETFs), share or index based options, futures contracts, options on futures contracts, and items that are bought or sold by auction.

20. The interactive grid-based graphical trading system of claim 1, wherein data communications over said communications channels are in keeping with selected protocols which are established to standardize data interchange between the grid-based graphical interface communicating over any said communications channels, with any backend systems; wherein said data communications may electively use secure data encryption modes.

21. The interactive grid-based graphical trading system of claim 7, wherein said middleware further performs the task of connection management, whereby connection requests from any trader's grid-based graphical interface to the backend systems are granted or rejected, and wherein existing connections are monitored and managed.

22. The interactive grid-based graphical trading system of claim 1, further including a display panel, wherein said display panel contains individual icons representing each security held by any respective trader in that trader's account.

23. The interactive grid-based graphical trading system of claim 22, wherein each icon represents a security position held by that trader in that trader's account, and any such icon is dragged and dropped onto a specific valid cell of the grid-based graphical interface; and wherein the drag and drop operation on any selected icon causes the grid-based graphical interface to issue transaction instructions to a respective backend system through said middleware.

24. The interactive grid-based graphical trading system of claim 1, further including a display panel associated with said interactive grid-based graphical trading system at any trader's location, wherein said display panel contains GUI objects to represent any monetary value or security which is held in any trader's account;

wherein said interactive grid-based graphical trading system further include fourth process means that permits said monetary value or security associated with a respective GUI object to be separated into a plurality of GUI objects, representing in total said monetary value or security, as elected by said trader.

25. The interactive grid-based graphical trading system of claim 24, wherein GUI objects are used to represent specific quantities of units of any selected security, and additional GUI objects are used to represent selected amounts of cash; and wherein, in each instance, each GUI object is linked to data representing said specific quantities of units of any selected security, or representing said selected amounts of cash in software at the trader's location.

26. The interactive grid-based graphical trading system of claim 1, wherein the grid-based graphical interface is application software, which is available through a computer at the respective trader's location.

27. The interactive grid-based graphical trading system of claim 9, wherein one of said plurality of rows or one of said plurality of columns of cells, is associated with at least one market participant, so that each cell can represent at least one specific quote data or order data being posted by at least one market participant for the selected security or item being displayed at any instant in time.

28. The interactive grid-based graphical trading system of claim 9, wherein cells representing at least one buy order or at least one buy quote at or near the bid price, and different cells representing at least one sell order or at least one sell quote at or near the ask price, which represent market trading data being posted by a market participant for a selected security, are simultaneously displayed.

29. The interactive grid-based graphical trading system of claim 9, wherein any cell that represents at least one order associated with at least one market participant at the respective specific price or range of specific prices indicated by that cell, is displayed with selected graphical properties.

30. The interactive grid-based graphical trading system of claim 29, wherein said graphical properties are chosen from the group consisting of : a distinct color, a distinct shape, distinct text labels, and combinations thereof; and wherein said graphical properties identify the cell as representing data for at least one order or at least one quote.

31. The interactive grid-based graphical trading system of claim 30, wherein a text label indicates at least one parameter selected by a trader for said at least one order or at least one quote represented by said cell; wherein said at least one parameter is chosen from the group consisting of order type, the quantity of units of the selected security, the symbol of the selected security, the duration of the order, and combinations thereof.

32. The interactive grid-based graphical trading system of claim 1, wherein additional data is associated with each cell; whereby said additional data can be electively displayed by clicking or right-clicking on said cell; and wherein said additional data is chosen from the group of data consisting of: the number of orders associated with said cell, the total volume or number of contracts, the total dollar value of the orders outstanding, the total volume of the orders traded, and the lot size outstanding, and combinations thereof.

33. The interactive grid-based graphical trading system of claim 1, wherein the data displayed on a display panel on said display device at any trader's location includes text based quote data and related summary statistics for a selected security or group of securities at any instant in time; and

5 wherein said text based quote data & related summary statistics includes data chosen from, the group consisting of: the exchange or market where the selected security is being traded, the current bid price, the current ask price, the current bid size, the current ask size, the last trade price, the size of the last transaction in terms of the number of units of the selected security traded, the change in the price of the last trade with respect to the closing price of the previous session, the
10 volume in terms of the number of units of the selected security that had been traded during the current trading session, the high price of the session, the low price of the session, the opening price of the session, and combinations thereof.

34. The interactive grid-based graphical trading system of claim 33, wherein said text based quote data is categorized as Level 1 data.

35. The interactive grid-based graphical trading system of claim 1, wherein a standard protocol defines the format of the instructions and data that are exchanged between the interactive grid-based graphical trading system and any backend system of any market participant.

36. The interactive grid-based graphical trading system of claim 35, wherein said standard protocol is based on eXtensible Markup Language (XML).

37. The interactive grid-based graphical trading system of claim 1, wherein data from a backend system is associated with a respective GUI object at any trader's grid-based graphical interface.

38. The interactive grid-based graphical trading system of claim 1, wherein a plurality of grid-based graphical interfaces are presented in a plurality of overlapping tab pages, and wherein the tab for any of said pages can be selected, wherein said plurality of tab pages are contained in at least one display panel on said display device, and wherein at least one grid-based graphical interface is associated with one tab page or one display panel at any instant in time.

39. The interactive grid-based graphical trading system of claim 38, wherein the specific visual or graphical properties of any tab page may change at any instant in time, as a result of a specific event occurring.

40. The interactive grid-based graphical trading system of claim 39, wherein said specific event is triggered by specific market or user defined criteria related to said tab page, or to the securities associated with said tab page.

41. The interactive grid-based graphical trading system of claim 38, wherein a transaction is effected by dragging and dropping GUI object representing a specific trading instruction, for a specific security, from one display panel on said system to the grid-based graphical interface.

42. The interactive grid-based graphical trading system of claim 38, wherein a transaction is effected by dragging and dropping a GUI object representing a specific trading instruction, for a specific security, from a grid-based graphical interface to an alternate GUI object.

43. The interactive grid-based graphical trading system of claim 42, wherein said specific trading instruction affects a cancel order instruction for the specific security.

44. The interactive grid-based graphical trading system of claim 5, wherein a transaction instruction which changes a parameter associated with an existing open order is translated by middleware used by any market participant, so as to appear to said trader as a single seamless instruction.

45. The interactive grid-based graphical trading system of claim 1, wherein any trading order transaction is effected by dragging and dropping a GUI object which is representative of the specific transaction onto a valid cell of the grid-based graphical interface, whereby said first process means will issue a respective transaction instruction through a respective communication channel to a respective market participant.

46. The interactive grid-based graphical trading system of claim 1, wherein any trading order transaction is effected by dragging and dropping a selected GUI object representative of an intended transaction onto a destination cell on said grid-based graphical interface, and wherein said dragging and dropping of said selected GUI object causes said grid-based graphical interface to apply said first process means, so as to result in the placement of a new order with a market participant; wherein said new order includes specific trading parameters, and wherein said second process means may electively alter said specific visual or graphical properties assigned to both said selected GUI object and said destination cell.

47. The interactive grid-based graphical trading system of claim 46, wherein any trading order transaction which has been placed on the grid-based graphical interface but not yet filled, is cancelled by dragging the respective GUI object associated with the order outside the grid-based graphical interface.

48. The interactive grid-based graphical trading system of claim 1, wherein any open order for a specific security for which a trader has discretion, is cancelled by dragging and dropping a selected cell associated with the specific open order from the grid-based graphical interface to a selected GUI object associated with a cancel transaction order; wherein said dragging and dropping of said cell causes said interactive grid-based graphical trading system to apply said first process

means, so as to result in the placement of a cancel order instruction with the associated market participant; wherein said cancel order instruction includes specific parameters; and wherein said second process may electively altersaid specific visual or graphical properties assigned to both said selected GUI object and said selected cell.

49. The interactive grid-based graphical trading system of claim 1, wherein the price values represented by said price axis is electively associated with an absolute price or price range, or a relative price or price range.

50. The interactive grid-based graphical trading system of claim 49, wherein the adjustment of the price values, and the alteration of the associated visual or graphical properties of each cell, along said price axis, is under the control of said third process means.

51. The interactive grid-based graphical trading system of claim 1, wherein the relevant visual or graphical properties of any cell associated with either order data or quote data will, dynamically change in response to an amendment of its original properties, and in relation with the values represented by said cell's respective axes.

52. The interactive grid-based graphical trading system of claim 1, wherein the displayed price range for any price axis is automatically determined according to a set of relevant market trading data.

53. The interactive grid-based graphical trading system of claim 52, wherein the range of price values which are displayed along said price axis, and the price value for a selected row or column, is determined for each selected security at any instant in time as a factor of one of the criteria chosen from the group consisting of; the closing price for that security during the prior session, the opening price for that security during the current session, the highest price paid for that security during the current session, the lowest price bid for that security during the current session, and the last price paid for that security, and combinations thereof.

54. The interactive grid-based graphical trading system of claim 1, wherein the criteria for said at least one column are chosen from the group consisting of: a market participant, a security, a component of an index, an index, aggregate trading data from a plurality of market participants, the trading activity of a market participant during the current session, the trading activity of a component of an index, the pending orders of the market participant at any instant in time, aggregate buy order and quote data from a plurality of market participants, aggregate sell order and quote data from a plurality of market participants, and combinations thereof.

55. The interactive grid-based graphical trading system of claim 1, wherein an axis not associated with the price axis can represent any market criteria aside from price.

56. The grid-based graphical trading system of claim 1, further including a display panel for an integrated chat session.

57. The interactive grid-based graphical trading system of claim 1, wherein said grid-based graphical interface for any trader has memory means associated therewith, whereby a record function stores said market trading data in said memory at selected time intervals; whereby a replay function for said data, to recall said market trading data associated with said selected time intervals, and to graphically display said data over a selected time period, is selectively invoked by said trader.

58. The interactive grid-based graphical trading system of claim 1, further including software whose purpose is to review and weigh a trader's cash position and portfolio holdings, so as to make a recommendation on an order parameter for a trading order for a selected security, at any instant in time, where the recommendation is a function of an order parameter chosen from the group of order parameters consisting of: the bid price, the bid size, the ask price, the ask size, the last trade price, the volume or contracts traded over an interval of time, the volatility, the liquidity, and combinations thereof, for said selected security at any instant in time.

59. The interactive grid-based graphical trading system of claim 58, wherein said order parameter is at least one of the size of the trading order, the quantity of the trading order, price of trading order, and duration of trading order for said selected security.

60. The interactive grid-based graphical trading system of claim 1, wherein the graphical display at any trader's location includes a display panel containing data categorized as Nasdaq Level II data for a selected security at any instant in time; and wherein said Nasdaq Level II data includes at least one set of data which is chosen from the group consisting; the identity of a market participant whose data is being displayed, the bid price and size associated with a given market participant's data, the ask price and size associated with a market participant's data, and combinations thereof.

61. The interactive grid-based graphical trading system of claim 1, wherein said at least one row or said at least one column has a GUI object associated therewith, whereby the status of open orders associated with said GUI object is changed under the control of said first process means.

62. The interactive grid-based graphical trading system of claim 1, wherein a specific color, text label, pattern, shape, or texture is associated for each different type of trading order which is displayed in any cell.

63. The interactive grid-based graphical trading system of claim 62, wherein a specific color, texture, text label, shape, or pattern is associated with each cell representing an ask price, or a higher price than said ask price, for any selected security in any given market; and wherein a different specific color, texture, text label, shape, or pattern is associated with each cell representing a bid price, or a lower price than said bid price, for said selected security in said any given market.

64. The interactive grid-based graphical trading system of claim 1, further including fourth process means that function to transform Nasdaq Level II data for any selected security, at any instant in time, into a format suitable for display on said grid-based graphical interface.

65. The interactive grid-based graphical trading system of claim 1, further including fifth process means that function to transform a stock exchange's market depth data, or an Electronic Communication Network's (ECNs) electronic order book for any selected security, at any instant in time, into a format suitable for display on said grid-based graphical interface.

66. The interactive grid-based graphical trading system of claim 57, wherein said replay function is controllable so that playback of said market trading data is accelerated in time, or de-accelerated in time, and displayed visually.

67. The interactive grid-based graphical trading system of claim 1, wherein said market trading data which is displayed for a selected security at any instant in time can be electively filtered to display a subset of said trading data, which subset satisfies criteria based at least on one parameter associated with said data.

68. The interactive grid-based graphical trading system of claim 27, wherein columns representative of a parameter of said trading data can be arranged automatically based on criteria defined by said trader.

69. The interactive grid-based graphical trading system of claim 27, wherein columns representative of a parameter of said trading data can be arranged manually through a drag and drop operation of a respective column header by said trader.

70. The interactive grid-based graphical trading system of claim 22, wherein any one of said icons is chosen from the group of images consisting of; the logo of the company associated with said security, the trading symbol of the security, the type of security, the quantity of units of said security, the type of order for said security, the status of the order for said security, and combinations thereof.

71. The interactive grid-based graphical trading system of claim 38, wherein a selected tab page associated with a given security will become the active tab page as a result of at least one user interaction associated with said security.

72. The interactive grid-based graphical trading system of claim 38, wherein a tab page is automatically created, at any instant in time, and is associated with a specific security, as a result of at least one user interaction associated with said security; and wherein said created tab page for said specific security does not exist prior to said user interaction.

73. The interactive grid-based graphical trading system of claim 1, wherein any cell representing a specific order is displayed relative to said price axis, wherein the position of said any cell is determined by the difference between the price associated with said specific order and the price associated with a base price indicator on said price axis, and wherein at least one cell representing a specific order, is displayed.

74. The interactive grid-based graphical trading system of claim 1, wherein any cell representing a specific quote is displayed relative to said price axis, wherein the position of said any cell is determined by the difference between the price associated with said specific quote and the price associated with a base price indicator on said price axis, and wherein at least one cell representing a specific quote, is displayed.

75. An interactive graphical trading system comprising of a graphical interface adapted to display market trading data received from at least one market participant, wherein said graphical interface establishes connections with any backend systems used by any market participant through communication channels; wherein said market trading data includes information chosen from the group of market trading data consisting of: order data as to buy, sell, or other trading orders, quote data as to bid and ask prices, volume, market participant identifiers, and other parameters, and wherein said market trading data is transmitted to said graphical interface from said back end system in computer-readable electronic format;

wherein said graphical interface includes at least one display panel for graphically presenting market trading data, wherein said market trading data is graphically presented on said at least one display panels;

wherein an intended trading order or a trading order is represented on said at least one display panel by a GUI object, wherein said GUI object is selected and positioned over said at

least one display panel, by a user of said graphical interface, using pointing and positioning means for pointing and positioning a GUI object on said graphical interface, and wherein the act of selecting and positioning said GUI object representing said trading order, over said at least one display panel, effects order placement or order modification instructions.

76. An interactive grid-based graphical software object for presenting market trading data, wherein said software object comprising a set of GUI objects, user interaction modes, and program logic;

wherein said interactive grid based graphical software object is implemented in software made available through a computer at a user's location;

wherein said interactive grid-based graphical software object is implemented as a software component, and said software component is incorporated into software applications and is adapted for any specific computing platform;

wherein said interactive grid based graphical software object is adapted to receive and display market trading data from a plurality of market trading data sources, wherein any particular market trading data source may be electively selected at any instant in time;

wherein said set of GUI objects are graphical representations of market trading data received by said interactive grid-based graphical software object, and said set of GUI objects are associated with visual and graphical properties selected from the group consisting of: color, shape, size, text labels, and combinations thereof;

wherein said user interaction modes represent a set of actions available to a user for interacting with said interactive grid based graphical software object; such that said user interaction modes affect the graphical representation displayed on said interactive grid-based graphical software object, wherein said user interaction modes are selected from the group consisting of: right click, double click, and left click using a pointing device, a drag and drop operation, a stylus screen tap, a stylus drag and drop operation, a touch screen tap, shortcut keys, and combinations thereof;

wherein said program logic functions to receive, process, and graphically represent market trading data; wherein said program logic further functions to receive, process, and interpret user interaction with said software object; wherein graphical representation includes at least one grid comprised of a plurality of cells arranged in an array of at least one row or at least one column;

wherein a row is an arrangement of horizontally adjacent cells with at least one common property, and a column is an arrangement of vertically adjacent cells with at least one common property, and wherein each cell within the said plurality of cells belongs to one row and one column;

wherein said plurality of cells is arranged in a matrix chosen from the group consisting of: a plurality of rows and at least one column, and in a plurality of columns and at least one row, and wherein said plurality of rows or said plurality of columns are associated with an axis representing price; wherein said axis representing price is the price axis;

wherein said visual and graphical properties of GUI objects are altered as a result of changes in the received market trading data and user interaction with said software object;

wherein any cell may be associated with said market trading data, and contains a graphical representation of said market trading data;

wherein said matrix is associated with said market trading data and contains a graphical representation of said market trading data;

wherein each cell along said price axis indicates a price or price range for which said market data exists, and the other of said at least one column or said a least one row is indicative of a specific criterion chosen from a plurality of criteria; within which said market trading data may be categorized as to price or a range of prices; wherein said plurality of criteria is from the group consisting of: a specific security, a group of securities, an index, a market trading participant, a group of market trading participants, a segment of time, and combinations thereof; and

wherein any trader can place or modify an order for a selected security or group of securities, over which said trader has discretion, by interacting with said interactive grid-based graphical software object; wherein said interaction is accomplished through user interaction modes.

77. An interactive grid-based graphical quote presentation system for use by any user to receive and display market trading data from any market participant, in essentially real time, said system comprising a grid-based graphical interface for use by any trader, wherein said graphical interface is adapted to establish at least one connection to any market participant through at least one communication channel;

wherein said interactive grid-based graphical quote presentation system is made available through a computer at any user's location;

wherein said interactive grid-based graphical quote presentation system for use by any user is adapted to receive and display market trading data received from a plurality of market participants, essentially in real time, and wherein any user may select any particular securities for which data are electively required, at any instant in time;

wherein said interactive grid-based graphical quote presentation system includes first process means that function to send requests through said communication channels to at least one market trading data source, and to receive messages from said at least one market participant through said at least one communication channel, and wherein said grid-based graphical quote presentation system includes second process means that function to receive, process, and display said market trading data, and said messages;

wherein said market trading data includes information chosen from the group of market trading data consisting of: quote data as to bid and ask prices, volume, market participant identifiers, and other parameters, existing at that instant in time for any selected security or group of securities; wherein said market trading data is transmitted to each said interactive grid-based graphical quote presentation system from said market participants in computer-readable electronic format;

wherein said interactive grid-based graphical quote presentation system includes third process means that function to transform said market trading data received from any market trading data sources, at any instant in time, into a graphical representation for display on any display device, wherein said graphical representation includes at least one grid having a plurality of cells in an array of at least one row or at least one column;

wherein a row is an arrangement of horizontally adjacent cells with at least one common property, and a column is an arrangement of vertically adjacent cells with at least one common property, and wherein each cell within said plurality of cells belongs to one row and one column;

wherein said plurality of cells is arranged in a matrix chosen from the group consisting of a plurality of rows and at least one column, and in a plurality of columns and at least

one row; and combinations thereof, and wherein said plurality of rows or plurality of columns are associated with an axis associated with price;

wherein any cell is associated with said market trading data, and contains a graphical representation of said market trading data, and is associated with a specific price or range of prices;

wherein each cell along said price axis indicates a price or price range for which said market trading data exists, and the other of said at least one column or said at least one row is indicative of a selected criteria chosen from a plurality of criteria within which said market trading data is categorized as to price or range of prices; and

wherein any user issues a request for trading information at any instant in time, by interacting with said interactive grid-based graphical quote presentation system, wherein said interaction can effect the issuance of said instructions associated with a request for quote information; wherein said interaction can be accomplished by at least one interaction modes.

78. A software object providing a graphical representation of trading data originating from at least one data source, wherein said graphical representation of trading data is electively interactive, and wherein said software object is executable by a computer, and comprising:

(a) first process means for establishing at least one connection with at least one data source, wherein said at least one data source is selected from the group consisting of: securities exchanges, stock markets, currency markets, commodities exchanges, electronic communication networks (ECNs), brokerage firms, auction houses, data feed providers, market simulation software, trading data published on computer-readable media, and combinations thereof; wherein said at least one data source is an external to the computer where said software object is executing; wherein said at least one data source can reside in the same computer where said software object is executing;

(b) second process means for retrieving and receiving trading data from said at least one data source, wherein said trading data is electively retrieved continuously or from time to time;

(c) third process means for transforming said trading data into a form that is suitable for display by said software object;

(d) fourth process means for displaying said trading data by means of at least one visual presentation style; and

(e) fifth process means for receiving and interpreting input from a user of said software object, through selected user interaction modes; wherein said input causes said software object to automatically generate trading instructions, based on said user's specific input and the context of the currently displayed trading data;

wherein said trading instructions are selected from the group consisting of: buy order instructions, sell order instructions, order cancellation instructions, and order amendment instructions; wherein said trading instructions are transmitted to at least one backend trading system capable of processing said trading instructions; wherein said at least one backend trading system is associated with at least one market participant; wherein said at least one market participant is selected from the group consisting of: stock exchanges, electronic communication networks (ECNs), order-entry firms, brokerage firms, commodities exchanges, and currency markets; wherein said at least one backend trading system can be market simulation software; wherein said at least one backend trading system is external to the computer where said software object is executing; and wherein said at least one backend trading system can reside in the same computer where said software object is executing;

wherein said trading data comprises data elements selected from the group consisting of: order data, quote data, and index data; wherein said order data and said quote data are associated with specific securities; wherein said order data and said quote data directly reflect real orders and quotes posted to at least one market, exchange, and qualified market participant; wherein said data elements possess a price dimension directly related to the price of the security associated with said data elements; wherein the values associated with said price dimension are numeric price values; and wherein said data elements possess at least one additional dimension or parameter; wherein said software object is adapted to retrieve said trading data from said at least one data source, and said trading data may be electively retrieved continuously, or from time to time; wherein said software object automatically binds to said trading data; wherein said software object comprises a drawing area for displaying a visual representation of said data elements;

wherein said data elements comprising order data and quote data are represented on said software object's drawing area by icons, shapes, and other graphical user interface (GUI) objects; wherein said icons, shapes, and other GUI objects are rendered by means of at least one

visual presentation style, wherein said at least one visual presentation style functions to graphically distinguish between different types of orders and quotes;

wherein said software object comprises an axis associated with numeric values, wherein said numeric values associated with said axis directly correspond to the numeric price values of said price dimension, and wherein said numeric values associated with said axis are based on at least one criterion;

wherein said software object comprises at least one additional axis associated with said at least one additional dimension or parameter;

wherein said axis and said at least one additional axis are represented on said drawing area using at least one visual presentation style;

wherein said first price axis and said at least one additional axis define a specific coordinate system when combined in a specific manner, which functions to describe the positions of said shapes or icons representing said data elements in said drawing area; and wherein said description of positions of said shapes or icons facilitates the plotting of said shapes or icons onto said drawing area;

wherein said plotting comprises at least one method for determining the positions of said shapes or icons, on said drawing area, wherein said at least one method is based on at least one criterion, and wherein said at least one criterion is the numeric price value of said price dimension associated with said data elements;

wherein said positions are defined in terms of said coordinate system, wherein said positions are determined for the purpose of plotting and rendering said shapes or icons, representing said data elements, onto said drawing area, and wherein said plotting and rendering is electively dynamic and continuous, and is linked to said continuous retrieval of data;

wherein said first price axis functions to provide a reference frame for plotting and rendering the dynamic variation in values of said price dimension associated with said data elements;

wherein said dynamic variation in values of said price dimension associated with said data elements is graphically represented by varying the positions of said shapes or icons on said drawing area, with respect to said first price axis;

wherein said at least one additional axis functions to categorize said data elements, as represented by said shapes or icons on said drawing area, according to at least one criterion, wherein said at least one criterion is based on the values of said additional dimensions or parameters associated with said data elements;

wherein said first price axis and said at least one additional axis function to facilitate the manipulation by a user of said software object, of the values of specific parameters associated with said data elements, as represented by said shapes or icons plotted and rendered on said software object's drawing area, by providing references against which variations in values can be measured; wherein said manipulation is subject to at least one rule, and wherein said manipulation is accomplished by means of at least one user interaction mode; and

wherein said manipulation by a user of said software object, causes said software object to automatically generate trading instructions, based on said user's specific input and the context of the currently displayed trading data; wherein said trading instructions are selected from the group consisting of: buy order instruction, sell order instruction, order cancellation instruction, and order amendment instruction; and wherein said trading instructions are sent to at least one backend trading system capable of processing said instructions.

79. A software object providing a graphical representation of trading data originating from at least one data source, wherein said software object is executable by a computer, and comprises:

first process means for establishing at least one connection with at least one data source;

second process means for receiving trading data from said at least one data source;

third process means for transforming said trading data into a form that is suitable for display by said software object; and

fourth process means for displaying said trading data by using at least one visual presentation style;

wherein said at least one data source is selected from the group consisting of: securities exchanges, stock markets, currency markets, commodities exchanges, electronic

communication networks (ECNs), brokerage firms, auction houses, data feed providers, market simulation software, trading data published on computer-readable media, and combinations thereof;

wherein said trading data comprises data elements selected from the group consisting of: quote data, order data, and index data; wherein said data elements are associated with a specific security or a group of securities; wherein said data elements possess a price dimension representing the price of the security or the value of the index associated with said data elements; wherein the values associated with said price dimension are numeric price values or numeric index values; and wherein said data elements possess at least one additional dimension;

wherein said software object further includes a visual manifestation displayed on said computer's associated display means; wherein said visual manifestation includes a drawing area for rendering a graphical representation of said trading data;

wherein said visual manifestation includes an axis associated with numeric price values which are associated with said price dimension, wherein said axis is rendered on said drawing area using at least one visual presentation style, and wherein said axis is a price axis;

wherein said visual manifestation further includes graphical user interface (GUI) objects; wherein said GUI objects are selected from the group consisting of: icons, images, geometric shapes, and combinations thereof; wherein said GUI objects function to graphically represent order data and quote data received from said at least one data source; wherein said GUI objects are rendered on said drawing area by at least one visual presentation style; wherein said at least one visual presentation style functions to graphically distinguish between different types of orders and quotes associated with said data elements;

wherein said price axis defines one dimension of a coordinate system; wherein said coordinate system functions as a reference for plotting said GUI objects onto said drawing area;

wherein said plotting comprises at least one process for determining the positions where said GUI objects are rendered on said drawing area; wherein said at least one process correlates the numeric price values of said price dimension with the numeric price values associated with said price axis;

wherein said positions are defined with respect to said one dimension of a coordinate system, and are determined for the purpose of plotting and rendering said GUI objects onto said drawing area;

wherein said trading data is received essentially continuously; wherein said essentially continuous reception of trading data effects dynamic variations in the values of said price dimension and said at least one additional dimension associated with said data elements; and

wherein said dynamic variations in the values of said price dimension, and said at least one additional dimension, is graphically represented by dynamically varying the positions and graphical properties of said GUI objects rendered on said drawing area.

80. The software object of claim 79, further comprising:

fifth process means for receiving and interpreting input from a user of said software object, by means of at least one user interaction mode;

wherein said visual manifestation's graphical properties and settings are electively adjusted by a user of said software object, wherein said adjustment is accomplished by said user through at least one user interaction mode; and wherein said adjustment is facilitated by said fifth process means.

81. The software object of claim 80, further comprising:

sixth process means for generating and transmitting trading instructions, and receiving feedback data pertaining to the status of said trading instructions;

wherein said fifth process means, and said sixth process means, together facilitate the graphical placement of trading orders, and the graphical amendment of trading orders; wherein said graphical placement and said graphical amendment of trading orders is performed by a user of said software object by interacting with said visual manifestation, wherein said interaction is subject to at least one rule; wherein said interaction is accomplished by means of at least one user interaction mode; wherein said GUI objects function to graphically represent trading orders initiated by a user of said software object;

wherein said graphical placement and graphical amendment of trading orders causes said software object to generate trading instructions, wherein said trading instructions are selected from the group consisting of: buy order instructions, sell order instructions, order cancellation instructions, and order amendment instructions; wherein said trading instructions are transmitted to at least one backend trading system capable of processing said trading instructions; wherein said at

least one backend trading system is associated with at least one market participant; wherein said at least one market participant is selected from the group consisting of: securities exchanges, stock markets, currency markets, commodities exchanges, electronic communication networks (ECNs), brokerage firms, and auction houses; and wherein feedback data pertaining to the status of said trading orders is received and interpreted by said software object through said sixth process means.

82. The software object of claim 79, wherein said at least one data source is external to the computer where said software object is executing; and wherein said external data source is accessible to said software object through communication channels.

83. The software object of claim 79, wherein said at least one data source resides in the same computer where said software object is executing.

84. The software object of claim 79, wherein said software object is adapted to receive streaming trading data from said at least one data source; and wherein said trading data is received in essentially real-time.

85. The software object of claim 79, wherein said software object is adapted to request said trading data from said at least one data source; wherein said trading data is received in response to said request; wherein said trading data is requested and received essentially continuously; and wherein said trading data is received in essentially real-time.

86. The software object of claim 79, wherein said visual manifestation further includes at least one additional axis; wherein said at least one additional axis is associated with at least one additional dimension associated with said data elements; wherein said at least one additional axis is associated with at least one criterion; wherein said at least one criterion is selected from the group consisting of: a market participant, a group of market participants, a security, a group of securities, an index, an interval of time, and combinations thereof;

wherein said at least one additional axis is rendered on said drawing area using at least one visual presentation style;

wherein said price axis and said at least one additional axis combine to define a multi-dimensional coordinate system; wherein the number of dimensions of said multi-dimensional coordinate system is determined by the number of axes; and wherein said multi-dimensional coordinate system functions as a reference for plotting said GUI objects onto said drawing area;

wherein said plotting includes at least one process for determining the positions where said GUI objects are rendered on said drawing area; wherein said at least one process correlates the numeric price values of said price dimension, with the numeric price values associated with said price axis; wherein said at least one process categorizes said data elements according to said at least one criterion associated with said at least one additional axis; and

wherein said positions are determined with respect to said multi-dimensional coordinate system, and are determined for the purpose of plotting and rendering said GUI objects onto said drawing area.

87. The software object of claim 79, wherein said at least one backend trading system is external to the computer where said software object is executing; and wherein said at least one backend trading system is accessible to said software object through communication channels.

88. The software object of claim 79, wherein said at least one backend trading system resides in the same computer where said software object is executing.

89. The software object of claim 81, wherein said feedback data is transformed into a form that is suitable for display on said drawing area, through said third process means; and wherein said feedback data is displayed on said drawing area, through said fourth process means.

90. The software object of claim 79, wherein said software object is adapted to connect, and retrieve trading data from a plurality of data sources; wherein said plurality of data sources are external to the computer where said software object is executing; wherein said plurality of data sources are accessible to said software object through communication channels; wherein said plurality of data sources employ dissimilar communication protocols; and wherein communication between said software object and said plurality of data sources is facilitated by middleware.

91. The software object of claim 81, wherein said software object is adapted to transmit trading instructions to, and receive feedback data from, a plurality of backend trading systems; wherein said plurality of backend trading systems are external to the computer where said software object is executing; wherein said plurality of data sources are accessible to said software object through communication channels; wherein said plurality of backend trading systems employ dissimilar communication protocols; and wherein communication between said software object and said plurality of backend trading systems is facilitated by middleware.

92. The software object of claim 79, wherein said software object is implemented as an integrated feature of an application program intended for securities trading.

93. The software object of claim 79, wherein said software object is implemented as a self-contained, reusable software component; wherein said software component is selected from the group consisting of: an ActiveX control, a Java applet, a Java Swing component, and combinations thereof; wherein said implementation of said software object independently functions as a quote presentation system, or as a quote presentation system with order placement and order amendment capabilities; and wherein said software object is incorporated within an application program intended for securities trading.

94. The software object of claim 79, wherein said software object is implemented as a set of macros or scripts; wherein said macros or scripts are created by utilizing the programmability features of specific application programs; and wherein said specific application programs is selected from the group consisting of: Microsoft Excel, Microsoft Word, Microsoft PowerPoint, Microsoft Visio, Lotus 1-2-3, and WordPerfect.

95. The software object of claim 79, wherein said trading data is encoded using eXtensible Markup Language (XML); and wherein said trading data is compressed, encrypted, or both.

96. The software object of claim 81, wherein said trading instructions are encoded using eXtensible Markup Language (XML); and wherein said trading instructions are compressed, encrypted, or both.

97. The software object of claim 81, wherein said price axis is directly related to the range of trading prices associated with a specific security and is partitioned into a plurality of segments; wherein each of said plurality of segments represents a numeric price, or a range of numeric prices representative of the trading prices of said specific security; wherein every trading price associated with said specific security is represented in said price axis by not more than one segment along said price axis; wherein each of said plurality of segments is labeled with a nominal numeric value representative of the price or range of prices associated with said segment; and wherein the difference between the nominal numeric prices associated with any two adjacent segments corresponds to said specific security's minimum price variance (MPV), or a multiple thereof.

98. The software object of claim 79, wherein said price axis is indirectly related to the range of trading prices associated with a specific security or group of securities; wherein said price axis is partitioned into a plurality of segments; wherein each of said plurality of segments is associated with a numeric value; wherein a specific segment of said price axis is associated with a reference value; wherein said reference value is selected from the group consisting of: the previous closing price of the security, the bid price, the ask price, the last trade price, an index value, the average price, the high price, and the low price of said security's price or said index value over a selected period of time;

wherein the numeric values associated with said plurality of segments distinct from said specific segment are determined based on the difference between a nominal numeric value associated with said reference value and a multiple of a specific increment value; wherein each of said plurality of segments is labeled with a nominal numeric value representative of said difference;

wherein the positions for plotting said GUI objects onto said drawing area are determined using a mathematical formula; wherein said mathematical formula is based on the

difference between a price parameter of said specific security or group of securities, and said reference value; and wherein said price parameter is selected from the group consisting of: the last trade price, the limit order price, the stop order price, and combinations thereof.

99. The software object of claim 80, wherein said at least one user interaction mode is selected from the group consisting of: clicking, double-clicking, dragging and dropping, pressing a keyboard shortcut, pressing a command button, and typing, and combinations thereof; wherein said at least one user interaction mode utilizes at least one input device; and wherein said at least one input device is selected from the group consisting of: a mouse, a trackball, a stylus, a joystick, a light pen, a keyboard, a pointing device, and combinations thereof.

100. An interactive grid-based graphical trading system for use by any trader, where the system comprises a grid-based graphical interface, said graphical interface being adapted to establish connections with any backend system;

wherein said interactive grid-based graphical trading system is adapted to receive and display market trading data received from said backend system;

wherein said interactive grid-based graphical trading system includes first process means that function to send transaction instructions to said backend system, and to receive messages and market trading data from said backend system; and wherein said grid-based graphical interface includes second process means that function to receive, process, and display said market trading data, and said messages;

wherein said market trading data includes information chosen from the group of market trading data consisting of: order data of said trader, and quote data for any selected security or group of securities;

wherein said interactive grid-based graphical trading system includes third process means that function to transform said market trading data into a graphical representation for display on a display device, wherein said graphical representation includes at least one grid having a plurality of cells arranged in a matrix chosen from the group consisting of: a plurality of rows and at least one column, and a plurality of columns and at least one row;

wherein a row is an arrangement of horizontally adjacent cells with at least one common property, and a column is an arrangement of vertically adjacent cells with at least one common property, and wherein each cell within the said plurality of cells belongs to one row and one column;

wherein said plurality of rows or said plurality of columns are associated with a price axis representing a range of prices, wherein said range of prices is associated with the trading price range of any given security;

wherein any cell may be associated with said market trading data, and contains a graphical representation of said market trading data;

wherein each cell along said price axis indicates a price or price range for which said market trading data exists, and the other of said at least one column or said at least one row is indicative of a specific criterion chosen from a plurality of criteria within which said market trading data may be categorized; and

wherein said any trader can place, or modify, an order for a selected security or group of securities, over which that trader has discretion, by interacting with said grid-based graphical interface.

101. The interactive grid-based graphical trading system of claim 100, wherein said trader engages in trading securities through established security trading markets.

102. The interactive grid-based graphical trading system of claim 100, wherein said trader engages in trading securities in real time.

103. The interactive grid-based graphical trading system of claim 100, wherein said connections are established by said grid-based graphical trading system to any backend system used by any market participant.

104. The interactive grid-based graphical trading system of claim 100, wherein said connection with any backend system is established through suitable communications channels.

105. The interactive grid-based graphical trading system of claim 100, wherein said communication channels include middleware used by any market participant.

106. The interactive grid-based graphical trading system of claim 100, wherein said order data of said trader is chosen from the group consisting of: buy, sell or other trading orders existing at that instant in time, for any selected security or group of securities.

107. The interactive grid-based graphical trading system of claim 100, wherein said quote data is chosen from the group consisting of: bid price, ask price, last trade prices, bid size, ask size, last trade volume, market participant identifier, and other quote parameters for any selected security or group of securities, and combinations thereof.

108. The interactive grid-based graphical trading system of claim 100, wherein said interactive grid-based graphical trading system is available through a computer at each trader's site.

109. The interactive grid-based graphical trading system of claim 100, wherein said user may select any particular securities for which data are electively required, at any instant in time.

110. The interactive grid-based graphical trading system of claim 100, wherein said plurality of criteria is chosen from the group consisting of: a specific security, a group of securities, an index, a market participant, a group of market participants, a segment of time, and combinations thereof.

111. The interactive grid-based graphical trading system of claim 100, wherein said graphical representation is associated with graphical properties chosen from the group consisting of: a distinct color, a distinct shape, distinct text labels, and combinations thereof; and wherein said graphical properties identify the cell as representing data for at least one order or at least one quote.

112. The interactive grid-based graphical trading system of claim 100, wherein said market trading data is transmitted to each said grid-based graphical interface at the site of said any trader from said backend system of any market participant, in computer-readable electronic format.

113. The interactive grid-based graphical trading system of claim 100, wherein said interaction is accomplished by a drag and drop operation.

114. An interactive trading recommendation system for use by any trader who engages in trading securities through established security trading markets, in essentially real time, said system comprising:

at least one input data, wherein said input data is chosen from the group consisting of: trading account data, securities data, preference data, risk data, and combinations thereof; and
process means to analyse said input data, and to output a recommendation as to the size or volume of an order;
wherein said recommendation is a numeric value.

115. The interactive trading recommendation system of claim 114, wherein said trading account data is chosen from the group consisting of: cash in a trading account, the market value of all securities in a trading account, the value of a portfolio, margin in a trading account, the value of stocks in a trading account, the value of bonds in a trading account, the value of mutual funds in a trading account, the buying power associated with a trading account, and combinations thereof.

116. The interactive trading system of claim 114, wherein said securities data is chosen from the group consisting of: the value of an index: the bid, ask or last trade price of a security, a group of securities, or an index: holdings data on a security or a group of securities; and combinations thereof.

117. The interactive trading recommendation system of claim 114, wherein said preference data is chosen from the group consisting of: the minimum funds available for investment, the maximum funds available for investment, the funds available for investment in an industry sector

or group, the percentage of cash holdings to invest, the percentage of the portfolio to invest, the identity of a security, asset allocation data, the trader's investment objectives, and combinations thereof.

118. The interactive trading recommendation system of claim 114, wherein said risk data is chosen from the group consisting of: the volatility of security or a group of securities, the volatility of an index or group of indexes, a technical indicator, the profit or loss on a security or group of securities, and combinations thereof.

119. The interactive trading recommendation system of claim, 114 wherein said recommendation is represented as a GUI object.

120. The interactive trading recommendation system of claim 119, wherein said GUI object is dragged and dropped onto a suitable order entry interface of a trading system.

121. The interactive trading recommendation system of claim 114, wherein said recommendation is made available to at least one external system chosen from the group consisting of: a software object, a software application, a spreadsheet, a trading system, a website, and combinations thereof.

122. The interactive trading recommendation system of claim 114, wherein at least one of said input data is manually entered.

123. The interactive trading recommendation system of claim 120, wherein at least one of said input data is retrieved automatically.

124. The interactive trading recommendation system of claim 120, wherein said order entry interface is a grid-based graphical interface.

125. The interactive trading recommendation system of claim 114, wherein said system is implemented as a self-contained, reusable software component; wherein said software component is incorporated within an application program intended for securities trading.

126. The interactive trading recommendation system of claim 114, wherein said system is implemented as an integrated feature of an application program intended for securities trading.

127. The interactive trading recommendation system of claim 114, wherein said numeric value is representatives of a parameter of trading order chosen from the group consisting of: units of shares, units of lot size, number of contracts, and combinations thereof.

128. The interactive trading recommendation system of claim 114, wherein said numeric value is rounded up or down to a standard lot size or contract size.

129. The interactive trading recommendation system of claim 114, wherein said process means biases said numeric value, higher or lower, in accordance with at least one criterion chosen from the group consisting of a technical indicator, a statistic, a parameter of a security, a group of securities, and an index.

130. The interactive grid-based graphical trading system of claim 1, wherein a display panel is associated with an order entry function; wherein said display panel contains at least one tab page; wherein said tab page is associated with an order entry function for a specific order type; wherein the title of the tab of said page associates said specific order entry type with said tab page; and wherein said order entry type is chosen from the group consisting of: a market order, a limit order, a stop order, a short order, a change order, an options order, a futures order, a mutual fund order, a bond order, a T-bill order, a money market order, and combinations thereof.

131. The interactive grid-based graphical trading system of claim 1, wherein a displayed fixed price range associated with said price axis is electively adjusted to display the price range in accordance with the current trading price range or spread of a security or a group of securities.

132. The interactive graphical trading system of claim 75, wherein any GUI object is assigned specific visual or graphical attributes or properties chosen from the group of graphical or visual attributes or properties consisting of color, border, label indicator, graphic overlay, text overlay, and combinations thereof; and

wherein the specific attribute or property assigned to any GUI object is a function of the specific market trading data associated therewith.

133. The interactive graphical trading system of claim 75, wherein any trader can modify the parameters of any order, over which that trader has discretion, for a selected security or group of securities being displayed on the interactive graphical interface, at any instant in time, by selecting a relevant GUI object representing an order using a pointing device interactive with said graphical interface, and dragging and dropping said selected GUI object representing an order to a destination display panel or GUI object; wherein said dragging and dropping of said selected GUI object representing an order causes said graphical interface to activate first process means to send transaction instructions comprising an amendment of previous specific trading parameters associated with the relevant selected order; and wherein second process means electively effects an alteration of the specific visual or graphical properties assigned to both said relevant GUI object representing an order and said destination display panel or GUI object.

134. The interactive graphical trading system of claim 75, wherein said market trading data representing specific order data and quote data for a selected security or group of securities, is represented by GUI objects, wherein each GUI object representing quote data or order data is associated with a specific price or range of specific prices for any given security or group of securities, and wherein said market trading data represented by GUI objects includes a plurality of specific components related to selected market parameters associated with said data.

135. The interactive graphical trading system of claim 75, wherein the trading data for any selected security being displayed at any instant in time by any trader is constantly updated having regard to new trading data being received by the graphical interface for that selected security.

136. The interactive graphical trading system of claim 75, further including a display panel, wherein said display panel contains individual icons representing each security held by any respective trader in that trader's account.

137. The interactive graphical trading system of claim 136, wherein each icon represents a security position held by that trader in that trader's account, and any such icon is be dragged and dropped onto a display panel of the graphical interface; and wherein the drag and drop operation on any selected icon causes the graphical interface to issue transaction instructions.

138. The interactive graphical trading system of claim 136, wherein a text label indicates at least one parameter selected by a trader for said at least one order or at least one quote represented by said GUI object; wherein said at least one parameter is chosen from the group consisting of order type, the quantity of units of the selected security, the symbol of the selected security, the duration of the order, and combinations thereof.

139. The interactive graphical trading system of claim 75, wherein a transaction may be effected by dragging and dropping GUI object representing a specific trading instruction, for a specific security, from one display panel on said system to another display panel.

140. The interactive graphical trading system of claim 75, wherein a transaction is effected by dragging and dropping a GUI object representing a specific trading instruction, for a specific security, from a graphical interface to an alternate GUI object.

141. The interactive graphical trading system of claim 140, wherein said specific trading instruction affects a cancel order instruction for the specific security.

142. The interactive graphical trading system of claim 133, wherein a transaction instruction that changes a parameter associated with an existing open order is translated by middleware used by any market participant, so as to appear to said trader as a single seamless instruction.

143. The interactive graphical trading system of claim 75, wherein a trading order transaction is effected by dragging and dropping a selected GUI object representative of an intended transaction onto a destination GUI object on said graphical interface, and wherein said dragging and dropping of said selected GUI object causes said graphical interface to apply said first process means, so as to result in the placement of a new order with a market participant; wherein said new order includes specific trading parameters, and wherein said second process means electively alters said specific visual or graphical properties assigned to both said selected GUI object and said destination GUI object.

144. The interactive graphical trading system of claim 75, wherein an open order for a specific security for which a trader has discretion, is cancelled by dragging and dropping a selected GUI object associated with the specific open order from the graphical interface to a selected GUI object associated with a cancel transaction order; wherein said dragging and dropping of said GUI object causes said interactive graphical trading system to apply said first process means, so as to result in the placement of a cancel order instruction with the associated market participant; wherein said cancel order instruction includes specific parameters; and wherein said second process electively alters said specific visual or graphical properties assigned to said selected GUI object.

145. The interactive graphical trading system of claim 75, wherein said criteria are chosen from the group consisting of: a market participant, a security, a component of an index, an index, aggregate trading data from a plurality of market participants, the trading activity of a market participant during the current session, the trading activity of a component of an index, the pending orders of the market participant at any instant in time, aggregate buy order data from a plurality of market participants, aggregate sell order data from a plurality of market participants, and combinations thereof.

146. The interactive graphical trading system of claim 75, wherein each market participant is chosen from the group consisting of stock brokerages, electronic communication networks (ECN's), stock exchanges, commodity exchanges, futures exchanges, bourses, and auction houses.

147. The interactive graphical trading system of claim 75, wherein each selected security for which market trading data is displayed is chosen from the group consisting of shares of stock, commodities, futures, options, bonds, warrants, exchange traded funds (ETFs), share or index based options, futures contracts, options on futures contracts, and items that are bought or sold by auction.

148. The software object of claim 76, wherein said at least one data source is external to the computer where said software object is executing; and
wherein said external data source is accessible to said software object through communication channels.

149. The software object of claim 76, wherein said at least one data source resides in the same computer where said software object is executing.

150. The software object of claim 76, wherein said software object is adapted to receive streaming trading data from said at least one data source; and wherein said trading data is received essentially in real time.

151. The software object of claim 76, wherein said GUI objects further comprises at least one additional axis; wherein said at least one additional axis is associated with data elements with at least one additional dimension; wherein said at least one additional axis is associated with at least one criterion; wherein said at least one criterion is selected from the group consisting of: a market participant, a group of market participants, a security, a group of securities, an index, an interval of time, and combinations thereof;

wherein said price axis and said at least one additional axis combine to define a multi-dimensional coordinate system; wherein the number of dimensions of said multi-dimensional coordinate system is determined by the number of axes; wherein said multi-dimensional coordinate

system functions as a reference for displaying said GUI objects onto a grid-based graphical interface;

wherein displaying a GUI object comprises at least one method for determining the positions where said GUI objects are rendered on said grid based graphical interface; wherein said at least one method correlates the numeric price values of said price dimension, with the numeric price values associated with said price axis; wherein said at least one method categorizes said data elements according to said at least one criterion associated with said at least one additional axis; and

wherein said positions are determined with respect to said multi-dimensional coordinate system; wherein said positions are determined for the purpose displaying said GUI objects onto said grid based graphical interface.

152. The software object of claim 76, wherein said at least one market participant possesses at least one trading system physically separated from the computer where said software object is executing; and wherein said trading system is accessible to said software object through communication channels.

153. The software object of claim 76, wherein said at least one market participant possesses at least one trading system physically residing in the same computer where said software object is executing; and wherein said trading system is accessible to said software object through communication channels.

154. The software object of claim 76, wherein said software object is capable of connecting, receiving, and retrieving trading data from at least one data source; wherein said at least one data source is physically separated from the computer where said software object is executing; wherein said at least one data source is accessible to said software object through communication channels; wherein said at least one data source is a diverse system; and wherein said communication is facilitated by middleware.

155. The software object of claim 76, wherein said software object is implemented as an integrated feature of an application program intended for securities trading.

156. The software object of claim 76, wherein said software object is implemented as a self-contained, reusable software component; wherein said software component is selected from the group consisting of: an ActiveX control, a Java applet, a Java Swing component, and combinations thereof; wherein said implementation of the software object independently functions as a quote presentation system, or as a quote presentation system with order placement and order amendment capabilities; and wherein said software object is incorporated within an application program intended for securities trading.

157. The software object of claim 76, wherein said software object is implemented as a set of macros or scripts; wherein said macros or scripts are created by utilizing the programmability features of specific application programs; and wherein said specific application programs is selected from the group consisting of: Microsoft Excel, Microsoft Word, Microsoft PowerPoint, Microsoft Visio, Lotus 1-2-3, and WordPerfect.

158. The software object of claim 76, wherein said trading data is encoded using eXtensible Markup Language (XML); and wherein said trading data is compressed, encrypted, or both.

159. The software object of claim 76, wherein said price axis is directly related to the range of trading prices associated with a specific security; wherein said price axis is partitioned into a plurality of segments; wherein each of said plurality of segments represents a numeric price, or a range of numeric prices representative of the trading prices of said specific security; wherein every trading price associated with said specific security is represented in said price axis by at most one segment along said price axis; wherein each of said plurality of segments is labeled with a nominal numeric value representative of the price or range of prices associated with said segment; and wherein the difference between the nominal numeric prices associated with any two adjacent

segments corresponds to said specific security's minimum price variance (MPV), or a multiple thereof.

160. The interactive grid-based graphical trading system of claim 76, wherein said axis associated with price is presented as a specific price range above and a specific price range below the last traded price of a selected security or groups of securities at any instant in time, and wherein said last traded price is present on said price axis.

161. The interactive grid-based graphical trading system of claim 158, wherein the price difference between two adjacent cells along said price axis is the minimum price variance (MPV), or a multiple of the minimum price variance, for any selected security or groups of securities being displayed at any instant in time.

162. The software object of claim 76, wherein said price axis is indirectly related to the range of trading prices associated with a specific security; wherein said price axis is representative of a mathematical formula; wherein said mathematical formula is based on the difference between a price parameter of said specific security and a reference value; wherein said reference value is selected from the group consisting of: the previous closing price of the security, the bid price, the ask price, the last trade price, an index value, and the average, the high, or the low of said security's price or said index value over any given period of time; and wherein said price parameter is selected from the group consisting of: the last trade price, the limit order price, the stop order price, or combinations thereof; and

wherein said price axis is partitioned into a plurality of segments; wherein each of said plurality of segments is associated with the result of the application of said mathematical formula to said data elements; wherein each of said plurality of segments is labeled with a nominal numeric value representative of said result.

163. The interactive grid-based graphical quote presentation system of claim 77, wherein said communication channels are network-based, so that at any instant in time a connection between any trader and a backend system of any market participant is persistent or intermittent.

164. The interactive grid-based graphical quote presentation system of claim 161, wherein said network is the Internet.

165. The interactive grid-based graphical quote presentation system of claim 77, wherein any cell in said plurality of cells is assigned specific visual or graphical attributes or properties chosen from the group of graphical or visual attributes or properties consisting of: color, border, label indicator, graphic overlay, text overlay, and combinations thereof; and wherein the specific attribute or property assigned to any cell is a function of the specific market trading data associated therewith.

166. The interactive grid-based graphical quote presentation system of claim 77, wherein said axis associated with price is presented as a specific price range above and a specific price range below the last traded price of a selected security or groups of securities at any instant in time, and wherein said last traded price is present on said price axis.

167. The interactive grid-based graphical quote presentation system of claim 77, wherein said communication channels include middleware used by any market participant.

168. The interactive grid-based graphical quote presentation system of claim 166, wherein the price difference between two adjacent cells along said price axis is the minimum price variance (MPV), or a multiple of the minimum price variance, for any selected security or groups of securities being displayed at any instant in time.

169. The interactive grid-based graphical quote presentation system of claim 77, wherein said market trading data representing specific quote data for a selected security or group of securities, is presented in a matrix comprising a plurality of rows and a plurality of columns of cells, wherein each row of cells or each column of cells is associated with a specific price or range of specific prices for any given security or group of securities, and wherein said market trading data being displayed in any cell of said row of cells or said column of cells includes a plurality of specific components related to selected market parameters associated with said data.

170. The interactive grid-based graphical quote presentation system of claim 169, wherein specific quote data are linked and associated to a respective one of a set of GUI objects in said grid-based graphical interface at each said trader's location.

171. The interactive grid-based graphical quote presentation system of claim 168, wherein said middleware functions to translate data and instructions sent over any communication channel into a format that is understood by said grid-based graphical interface at any trader's location, or a respective backend system at any market participant's location.

172. The interactive grid-based graphical quote presentation system of claim 77, wherein said grid-based graphical interface for any trader has data storage.

173. The interactive grid-based graphical quote presentation system of claim 166, wherein said middleware has associated data storage relevant to said system.

174. The interactive grid-based graphical quote presentation system of claim 77, wherein a selected security for which said trading data is displayed at any instant in time may be changed to another selected security by any trader, at any instant in time.

175. The interactive grid-based graphical quote presentation system of claim 77, wherein the trading data for any selected security being displayed at any instant in time by any trader is constantly updated having regard to new trading data being received by the grid-based graphical interface for that selected security.

176. The interactive grid-based graphical quote presentation system of claim 77, further including icons representing each security.

177. The interactive grid-based graphical quote presentation system of claim 167, wherein one of said plurality of rows or one of said plurality of columns of cells, is associated with at least one market participant, so that each cell can represent one or more specific quote data being posted

by at least one market participant for the selected security or item being displayed at any instant in time.

178. The interactive grid-based graphical quote presentation system of claim 167, wherein cells representing a selected quantity of buy orders at or near the bid price, and different cells representing a selected quantity of sell orders at or near the ask price, which represent market trading data being posted by a market participant for a selected security, are simultaneously displayed.

179. The interactive grid-based graphical quote presentation system of claim 77, wherein said graphical properties are chosen from the group consisting of: a distinct color, a distinct shape, distinct text labels, and combinations thereof; and wherein said graphical properties identify the cell as representing data for at least one quote.

180. The interactive grid-based graphical quote presentation system of claim 179, wherein a text label indicates at least one parameter selected by a trader for said at least one quote represented by said cell; wherein said at least one parameter is chosen from the group consisting of order type, the quantity of units of the selected security, the symbol of the selected security, the duration of the order, and combinations thereof.

181. The interactive grid-based graphical quote presentation system of claim 77, wherein additional data is associated with each cell; whereby said additional data can be electively displayed by clicking or right-clicking on said cell; and wherein said additional data is chosen from the group of data consisting of: the number of orders associated with said cell, the total volume or number of contracts, the total dollar value of the orders outstanding, the total volume of the orders traded, and the lot size outstanding, and combinations thereof.

182. The interactive grid-based graphical quote presentation system of claim 77, wherein the data displayed on a display panel on said display device at any trader's location includes text based quote data and related summary statistics for a selected security or group of securities at any instant in time; and

wherein said text based quote data and related summary statistics includes data chosen from, the group consisting of: the exchange or market where the selected security is being traded, the current bid price, the current ask price, the current bid size, the current ask size, the last trade price, the size of the last transaction in terms of the number of units of the selected security traded, the change in the price of the last trade with respect to the closing price of the previous session, the volume in terms of the number of units of the selected security that had been traded during the current trading session, the high price of the session, the low price of the session, the opening price of the session, and combinations thereof.

183. The interactive grid-based graphical quote presentation system of claim 77, wherein the price values represented by said price axis is electively associated with an absolute price or price range, or a relative price or price range.

184. The interactive grid-based graphical quote presentation system of claim 183, wherein the adjustment of the price values, and the alteration of the associated visual or graphical properties of each cell, along said price axis, is under the control of said third process means.

185. The interactive grid-based graphical quote presentation system of claim 77, wherein the relevant visual or graphical properties of any cell associated with quote data will, dynamically change in response to an amendment of its original properties, and in relation with the values represented by said cell's respective axes.

186. The interactive grid-based graphical quote presentation system of claim 77, wherein the displayed price range for any price axis is automatically determined according to a set of relevant market trading data.

187. The interactive grid-based graphical quote presentation system of claim 186, wherein the range of price values which are displayed along said price axis, and the price value for a selected row or column, is determined for each selected security at any instant in time as a factor of one of the criteria chosen from the group consisting of; the closing price for that security during the prior

session, the opening price for that security during the current session, the highest price paid for that security during the current session, the lowest price bid for that security during the current session, and the last price paid for that security, and combinations thereof.

188. The interactive grid-based graphical quote presentation system of claim 77, wherein the criteria for said at least one column are chosen from the group consisting of: a market participant, a security, a component of an index, an index, aggregate trading data from a plurality of market participants, the trading activity of a market participant during the current session, the trading activity of a component of an index, the pending orders of the market participant at any instant in time, aggregate buy order data from a plurality of market participants, aggregate sell order data from a plurality of market participants, and combinations thereof.

189. The interactive grid-based graphical quote presentation system of claim 77, wherein an axis not associated with the price axis can represent any market criteria aside from price.

190. The interactive grid-based graphical quote presentation system of claim 77, wherein said grid-based graphical interface for any trader has memory means associated therewith, whereby a record function stores said market trading data in said memory at selected time intervals; whereby a replay function for said data, to recall said market trading data associated with said selected time intervals, and to graphically display said data over a selected time period, may be selectively invoked by said trader.

191. The interactive grid-based graphical quote presentation system of claim 77, wherein a specific color, text label, pattern, shape, or texture is associated for each different type of trading order which is displayed in any cell.

192. The interactive grid-based graphical quote presentation system of claim 191, wherein a specific color, texture, text label, shape, or pattern is associated with each cell representing an ask price, or a higher price than said ask price, for any selected security in any given market; and wherein a different specific color, texture, text label, shape, or pattern is associated with each cell

representing a bid price, or a lower price than said bid price, for said selected security in said any given market.

193. The interactive grid-based graphical quote presentation system of claim 77, further including fourth process means that function to transform NASDAQ Level II data for any selected security, at any instant in time, into a format suitable for display on said grid-based graphical interface.

194. The interactive grid-based graphical quote presentation system of claim 77, further including fifth process means that function to transform a stock exchange's market depth data, or an Electronic Communication Network's (ECNs) electronic order book for any selected security, at any instant in time, into a format suitable for display on said grid-based graphical interface.

195. The interactive grid-based graphical quote presentation system of claim 190, wherein said replay function is controllable so that playback of said market trading data is accelerated in time, or de-accelerated in time, and displayed visually.

196. The interactive grid-based graphical quote presentation system of claim 77, wherein said market trading data which is displayed for a selected security at any instant in time can be electively filtered to display a subset of said trading data, which subset satisfies criteria based at least on one parameter associated with said data.

197. The interactive grid-based graphical quote presentation system of claim 177, wherein columns representative of a parameter of said trading data can be arranged automatically based on criteria defined by said trader.

198. The interactive grid-based graphical quote presentation system of claim 177, wherein columns representative of a parameter of said trading data can be arranged manually through a drag and drop operation of a respective column header by said trader.

199. The interactive grid-based graphical quote presentation system of claim 176, wherein any one of said icons is chosen from the group of images consisting of; the logo of the company associated with said security, the trading symbol of the security, the type of security, the quantity of units of said security, the type of order for said security, the status of the order for said security, and combinations thereof.

200.. The interactive grid-based graphical quote presentation system of claim 77, wherein any cell representing a specific quote is displayed relative to said price axis, wherein the position of said any cell is determined by the difference between the price associated with said specific quote and the price associated with a base price indicator on said price axis, and wherein at least one cell representing a specific quote, is displayed.

201. The software object of claim 79, wherein differences in the values of said price dimension associated with said order data and quote data are represented through positional distinction, by plotting GUI objects representative of said order data and quote data onto specific positions on said drawing area; and wherein said specific positions are determined by mapping the value of said price dimension against the values associated with said price axis.

202. The software object of claim 79, wherein said trading data is representative of NASDAQ Level II data

203. The software object of claim 80, wherein a selected security for which trading data is displayed at any instant in time may be changed to another selected security by any trader, at any instant in time; and wherein said trading data can be electively filtered to display a subset of said trading data, which subset satisfies criteria based at least on one parameter associated with said trading data.

204. The software object of claim 81, wherein said backend trading system is market simulation software.

205. The software object of claim 86, wherein differences in the values of said price dimension and the values of said additional dimensions associated with said order data and quote data are represented through positional distinction, by plotting said GUI objects representative of said order and quote data onto specific positions on said drawing area; and wherein said specific positions are determined by mapping the value of said price dimension and the values of said additional dimensions against the values associated with said price axis and the values associated with said at least one additional axis.

206. The interactive grid-based graphical trading system of claim 100, wherein said axis associated with price is presented as a specific price range above and a specific price range below the last traded price of a selected security or groups of securities at any instant in time, and wherein said last traded price is present on said price axis.

207. The interactive grid-based graphical trading system of claim 206, wherein the price difference between two adjacent cells along said price axis is the minimum price variance (MPV), or a multiple of the minimum price variance, for any selected security or groups of securities being displayed at any instant in time.

208. The interactive grid-based graphical trading system of claim 100, wherein specific order data and specific quote data are linked and associated to a respective one of a set of GUI objects in said grid-based graphical interface at each said trader's location.

209. The interactive grid-based graphical trading system of claim 100, wherein each market participant is chosen from the group consisting of stock brokerages, electronic communication networks (ECN's), stock exchanges, commodity exchanges, futures exchanges, bourses, and auction houses.

210. The interactive grid-based graphical trading system of claim 100, wherein each selected security for which market trading data is displayed is chosen from the group consisting of shares of stock, commodities, futures, options, bonds, warrants, exchange traded funds (ETFs), share

or index based options, futures contracts, options on futures contracts, and items that are bought or sold by auction.

211. The interactive grid-based graphical trading system of claim 104, wherein data communications over said communications channels are in keeping with selected protocols which are established to standardize data interchange between the grid-based graphical interface communicating over any said communications channels, with any backend systems; wherein said data communications may electively use secure data encryption modes.

212. The interactive grid-based graphical trading system of claim 100, further including a display panel, wherein said display panel contains individual icons representing each security held by any respective trader in that trader's account.

213. The interactive grid-based graphical trading system of claim 212, wherein each icon represents a security position held by that trader in that trader's account, and any such icon is dragged and dropped onto a specific valid cell of the grid-based graphical interface; and wherein the drag and drop operation on any selected icon causes the grid-based graphical interface to issue transaction instructions to a respective backend system through said middleware.

214. The interactive grid-based graphical trading system of claim 100, wherein cells representing a selected quantity of buy orders at or near the bid price, and different cells representing a selected quantity of sell orders at or near the ask price, which represent market trading data being posted by a market participant for a selected security, are simultaneously displayed.

215. The interactive grid-based graphical trading system of claim 100, wherein a text label indicates at least one parameter selected by a trader for said at least one order or at least one quote represented by said cell; wherein said at least one parameter is chosen from the group consisting of order type, the quantity of units of the selected security, the symbol of the selected security, the duration of the order, and combinations thereof.

216. The interactive grid-based graphical trading system of claim 100, wherein additional data is associated with each cell; whereby said additional data can be electively displayed by clicking or right-clicking on said cell; and wherein said additional data is chosen from the group of data consisting of: the number of orders associated with said cell, the total volume or number of contracts, the total dollar value of the orders outstanding, the total volume of the orders traded, and the lot size outstanding, and combinations thereof.

217. The interactive grid-based graphical trading system of claim 100, wherein the data displayed on a display panel on said display device at any trader's location includes text based quote data and related summary statistics for a selected security or group of securities at any instant in time; and

wherein said text based quote data and related summary statistics includes data chosen from, the group consisting of: the exchange or market where the selected security is being traded, the current bid price, the current ask price, the current bid size, the current ask size, the last trade price, the size of the last transaction in terms of the number of units of the selected security traded, the change in the price of the last trade with respect to the closing price of the previous session, the volume in terms of the number of units of the selected security that had been traded during the current trading session, the high price of the session, the low price of the session, the opening price of the session, and combinations thereof.

218. The interactive grid-based graphical trading system of claim 100, wherein a plurality of grid-based graphical interfaces are presented in a plurality of overlapping tab pages, and wherein the tab for any of said pages can be selected, wherein said plurality of tab pages are contained in at least one display panel on said display device, and wherein at least one grid-based graphical interface is associated with one tab page or one display panel at any instant in time.

219. The interactive grid-based graphical trading system of claim 218, wherein the specific visual or graphical properties of any tab page may change at any instant in time, as a result of a specific event occurring.

220. The interactive grid-based graphical trading system of claim 219, wherein said specific event is triggered by specific market or user defined criteria related to said tab page, or to the securities associated with said tab page.

221. The interactive grid-based graphical trading system of claim 100, wherein any trading order transaction may be effected by dragging and dropping a GUI object which is representative of the specific transaction onto a valid cell of the grid-based graphical interface, whereby said first process means will issue a respective transaction instruction through a respective communication channel to a respective market participant.

222. The interactive grid-based graphical trading system of claim 100, wherein the price values represented by said price axis is electively associated with an absolute price or price range, or a relative price or price range.

223. The interactive grid-based graphical trading system of claim 100, wherein an axis not associated with the price axis can represent any market criteria aside from price.

224. The interactive grid-based graphical trading system of claim 100, wherein said grid-based graphical interface for any trader has memory means associated therewith, whereby a record function stores said market trading data in said memory at selected time intervals; whereby a replay function for said data, to recall said market trading data associated with said selected time intervals, and to graphically display said data over a selected time period, may be selectively invoked by said trader.

225. The interactive grid-based graphical trading system of claim 100, further including software whose purpose is to review and weigh a trader's cash position and portfolio holdings, so as to make a recommendation on an order parameter for a trading order for a selected security, at any instant in time, where the recommendation is a function of an order parameter chosen from the group of order parameters consisting of: the bid price, the bid size, the ask price, the ask size, the

last trade price, the volume or contracts traded over an interval of time, the volatility, the liquidity, and combinations thereof, for said selected security at any instant in time.

226. The interactive grid-based graphical trading system of claim 225, wherein said order parameter is at least one of the size of the trading order, the quantity of the trading order, price of trading order, and duration of trading order for said selected security.

227. The interactive grid-based graphical trading system of claim 100, wherein the graphical display at any trader's location includes a display panel containing data categorized as NASDAQ Level II data for a selected security at any instant in time; and wherein said NASDAQ Level II data includes at least one set of data which is chosen from the group consisting; the identity of a market participant whose data is being displayed, the bid price and size associated with a given market participant's data, the ask price and size associated with a market participant's data, and combinations thereof.

228. The interactive grid-based graphical trading system of claim 100, wherein columns representative of a parameter of said trading data can be arranged automatically based on criteria defined by said trader.

229. The interactive grid-based graphical trading system of claim 100, wherein columns representative of a parameter of said trading data can be arranged manually through a drag and drop operation of a respective column header by said trader.

230. The interactive grid-based graphical trading system of claim 212, wherein any one of said icons is chosen from the group of images consisting of; the logo of the company associated with said security, the trading symbol of the security, the type of security, the quantity of units of said security, the type of order for said security, the status of the order for said security, and combinations thereof.

231. The interactive grid-based graphical trading system of claim 218, wherein a selected tab page associated with a given security will become the active tab page as a result of at least one user interaction associated with said security.

232. The interactive grid-based graphical trading system of claim 218, wherein a tab page is automatically created, at any instant in time, and is associated with a specific security, as a result of at least one user interaction associated with said security; and wherein said created tab page for said specific security does not exist prior to said user interaction.

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